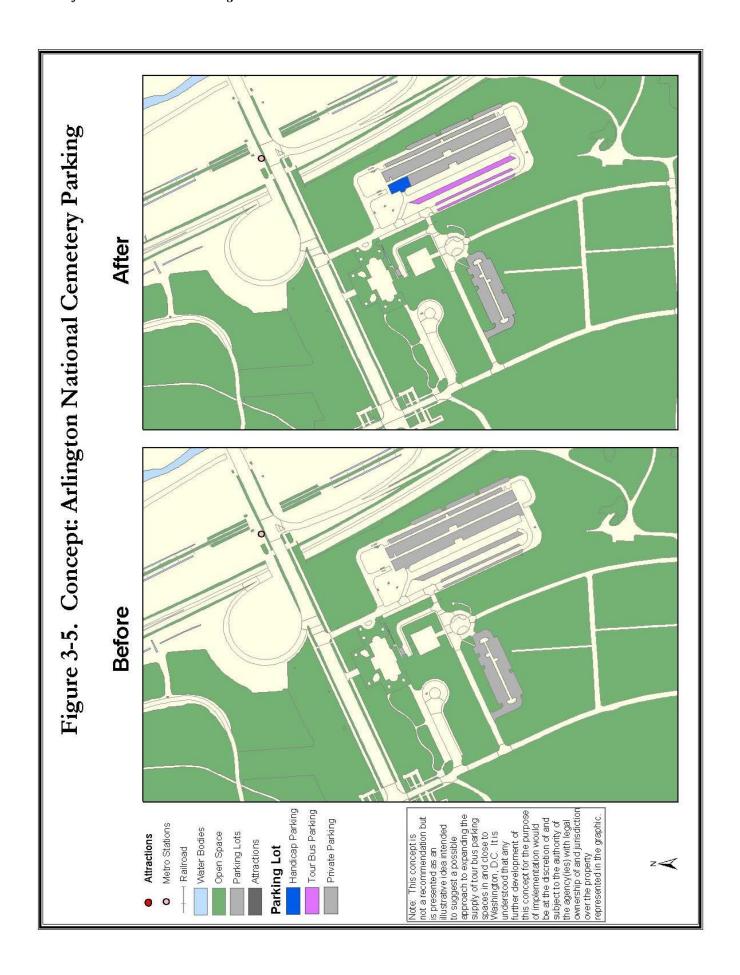
## **Exhibit 2 Parking Concept: Arlington National Cemetery**

- This option would expand the existing tour bus parking facility at Arlington National Cemetery (ANC) for use in servicing the western edge of the Monumental Core (e.g., Washington Monument, Lincoln Memorial, Korean Veterans Memorial, Vietnam Veterans Memorial, Jefferson Memorial, FDR Memorial and WW II Memorial), the ANC (also a major attraction), and Georgetown. A priority would be to accommodate tour groups during visits to Georgetown.
- The concept-design would be compatible with alternative concepts-of-operation: (1) long-term parking only; (2) drop-off/pickup with transfers to/from circulator bus system and long term tour bus parking.
- While a difficult traffic maneuver is required at the circle immediately to the west of the Arlington Memorial Bridge, several factors suggest that this condition, while warranting further study, is not a fatal flaw: (1) tour buses currently execute this maneuver and drivers are professionals accustomed to this type of condition; (2) the incremental volume of tour buses would be small relative to total traffic, particularly if additional tour bus parking areas are developed in other locations; and (3) tour bus volumes would be greater during off-peak driving periods, outside commuter rush hours.
- Site reconnaissance indicated the following (illustrated in accompanying figure) for existing Visitor Parking Facility at ANC. Surface parking consists of a partitioned space with capacity for 43 buses (current use) and 84 private vehicle (i.e. automobile) spaces, 12 of which are reserved for disabled plate personal vehicles. The first terrace level consists of a partitioned space with capacity for 231 private vehicles. The second terrace level consists of partitioned space with capacity for 236 private vehicles. (The number of spaces is approximate.) Road ramps lead from the surface level to the 1<sup>st</sup> terrace level, and from the 1<sup>st</sup> terrace level to the 2<sup>nd</sup> terrace level respectively (terrace levels below surface level elevation) (*See accompanying Figure 4-5*)
- The concept would entail use of all of surface level for tour bus operations. This would expand capacity for tour bus parking by a factor of two, with the approximate number of spaces equal to 90. Existing disabled plate (DP) spaces would remain at surface level. Concept therefore requires potential mitigation of 72 private vehicle spaces.
- Mitigation possibilities are several, with differing technical and cost implications and complexity.
- Mitigation possibility #1: build a surface lot with capacity for at least 72 private vehicle spaces in Section 56, with access via a ramp from the current surface lot to the new surface lot. There would be an at-grade intersection with a peripheral road that bounds Section 56 and connects to Halsey Drive.
- Mitigation possibility #2: build a surface lot with capacity for at least 72 private vehicle spaces in Section 56, with access via a ramp from the current surface lot to the new surface lot. There would be a grade separation via short tunnel section (only 9' clearance is necessary to service private vehicles) under the peripheral road that bounds Section 56 and connects with Halsey Drive.
- Mitigation possibility #1 and #2: reconfiguration of the existing surface lot for dedication to tour bus
  operations would require, to avoid bus/private vehicle conflicts, careful siting of private vehicle
  access roadway/ramp alignment to new surface lot for private vehicle use. This is necessary for both
  safety and efficiency considerations.
- Mitigation possibility # 3: build new (3<sup>rd</sup>) subsurface level with capacity for at least 72 private vehicle spaces under the adjacent peripheral highway (Jefferson Davis Highway, Rt. 110) with ramp access via extension of the ramp from 2<sup>nd</sup> terrace level. This extension would be a tunnel section leading to the 3<sup>rd</sup> (subsurface) level.
- Supporting policy options include the following. (1) fee structure to encourage use by tour bus operators, including a fee structure that would not be incompatible with multiple pull-in and pull-out possibilities in the course of a multi-stop tour (e.g., per day fee, not tied to per hour usage); (2) use of a pass that would require stamping in Georgetown if parking is designated specifically to serve Georgetown-destined tour groups; (3) circulator bus system design consisting of a well-designed route structure with each route a circuit that starts and stops at the ANC parking facility. The system would have to be a high frequency, short-wait system and with joint ticketing arrangements with tour operators so that service appears 'fareless' to patrons.
- The concept-design exploits well-designed and beautiful landscaped existing infrastructure that can be easily reconfigured to support tour bus operations.



## **Exhibit 3 Centrally-Located Parking Option: Union Station and Environs**

- An option for increasing the tour bus parking supply at Union Station consists of two components: reclamation of (a) the first level (referred to as the 'bus level') of Union Station for tour bus parking only; and (b) curbside space would be designated for tour bus use on adjacent streets in the vicinity of Union Station (identified below) that currently is used for short-term (generally 2 or 4-hour) private occupancy vehicle (POV) parking.
- Site reconnaissance indicated the following spaces and management of spaces on the 'bus level' of Union Station (approximations only): 37 spaces for 45' motor coaches on the right-hand edge of the 'bus level'; of these, 8 spaces are reserved under long-term contract for Greyline, 1 space for Greyhound, and 4 spaces for National Coach. Also observed were at least 5 spaces reserved for unspecified use, many of which were utilized by trucks and cars. Opposite the spaces reserved for motor coaches, and using the same access aisle, were 17 spaces reserved for 40' WMATA buses. These spaces, at time of observation, were empty and are used for layover by WMATA.
- A set of jersey barriers splits the 'bus level'. On the other side are spaces reserved in pockets for employees. The majority of spaces, however, are reserved for monthly contract parking for POVs. Complicating the parking configuration and potential re-configuration are a large number of structural columns and the spacing of these columns. The jersey barriers in front of the wheel stops for the spaces reserved for the WMATA 40' buses also currently preclude use of these spaces for 45' buses because of impingement on the common central aisle.
- While a precise set of alternative layouts for parking spaces for tour buses on the 'bus level' has not been developed, an approximation based on field observation suggests on the order of 80 45' motor coaches could be parked there without displacing those spaces reserved for employees. To provide maximum utilization and turnover ratios, these spaces would be managed on a first-come-first served (FCFS) basis. There would be no reserved spaces. Union Station at the 'bus level' already has good access/egress drives. Circulation to/from the facility is well ordered, including additional egress on the backside.
- If desired, mitigation could be undertaken for the spaces lost (approximately 17) that are used for terminal layover for the WMATA buses either at the planned added section of the Union Station.
- Feasibility of this part of the concept proposal depends on two factors. First, it depends on the ability of the expected number of motor coaches that would make use of this facility on the 'bus level' to pay fees which compensate in whole, or at least substantially, for the lost revenue stream represented by the displaced monthly contract spaces. Secondly, it depends on the ability to accommodate the spaces used by WMATA for terminal layover at the New York METRO station, the expansion of Union Station, or at some other convenient and nearby location. The other aspect of the concept proposal is the reclamation of curbside space on select streets adjacent to and in the vicinity of Union Station. The street and street segments indicated below (and the approximate number of spaces<sup>20</sup> that could be made available for motor coaches) are suggested based primarily on two criteria. These are: low volume of through traffic on the street, and abutting land uses that are not incompatible with use of the curbside for motor coach parking operations. These curbside spaces would be particularly well-suited to address the need for relatively short-term (< 1 hour) parking.

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<sup>&</sup>lt;sup>20</sup> Curbside space for a 45' motor coach assumes a 60' parking space, which allows for independent entry and exit in a forward flow operation at a slow 5 mph.

## See accompanying Figure 3-6

- 1<sup>st</sup> . Street NE adjacent to Union Station 2 tour buses
- G Place 7 tour buses
- M Street between 1<sup>st</sup> St. NE and the Railroad viaduct 10-14 tour buses (approximate) in angled spaces (45' length) on grass verge (appears to be a "no mans land") adjacent to the road. (The verge may be private property, lease or purchase of site would be necessary).
- Delaware Street on the easterly side of the Railroad Viaduct 7 tour buses
- 2<sup>nd</sup> Street NE between L street and Parker Street 5 tour buses on each side (10 total)
- Total: 36-40
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- 2<sup>nd</sup> Street NE between L street and Parker Street 5 tour buses on each side (10 total)
- Total: 36-40 spaces